

Challenges in the treatment of Iranian patients with leukemia in comparison with developed countries from the perspective of specialists

Ramin Bakhshi Biniaz¹, Mehdi Goudarzi², Mehdi Sahmani³, Mohammad Hossein Moghaddasi⁴, Ali Dehghanifard⁵, Moosa Vatanmakanian⁶, Mehdi Azad^{*,1}

¹Department of Medical laboratory sciences, School of Paramedicine, Qazvin University of Medical Sciences, Qazvin, Iran

²Department of Microbiology, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran

³Department of Clinical Biochemistry, Cellular and Molecular Research Center, Qazvin University of Medical Sciences, Qazvin, Iran

⁴Department of Hematology, Tarbiat Modarres University, Tehran, Iran

⁵Sarem Cell Research Center- SCRC, Sarem Women's Hospital, Tehran, Iran

⁶Department of Hematology, School of Paramedical sciences, Tehran University of Medical sciences, Tehran, Iran

*Corresponding Author: email address: haematologicca@gmail.com (M.Azad)

ABSTRACT

Evaluation of the factors associated with treatment process of leukemia and comparison with current related approaches in developed countries can present a good indicator to assess the weak and strong points in healthcare system of our country in leukemia treatment. The objective of this research is general and specific description of the challenges and shortcomings in Iranian healthcare system and monitoring of hematologic malignancies as well as comparison with developed countries. Our study is a descriptive-cross-sectional study. 100 hemato-oncologist, pathologists, and faculty members throughout the country were selected by random cluster sampling. Data collected using questionnaires with Cronbach's alpha coefficient of 0.76. SPSS and Chi-square test were used for data analysis. According to the specialists, lack of advanced diagnostic facilities as well as cell and BM banks together with high treatment expenses are the main factors contributing to poor treatment processes in Iran, which are far from worldwide standards. The use of novel currently methods used in developed countries for leukemia treatment, financial and psychological support of patients under treatment, making underprivileged provinces well-equipped, balanced specialist service distribution relative to capital city either in diagnosis or treatment are factors which makes system standardized. Moreover, integrated institutional work in relation to leukemia incidence and statistical analysis of mortality and morbidity rate can pave the way for reducing and eliminating the problems in diagnosis and treatment of leukemia patients.

Keywords: Treatment, Leukemia, Specialist

INTRODUCTION

The uncontrollable effects of malignant diseases and those mental and economical effects on a society is well obvious, and currently they considered as one of the most significant health problems in the world [1]. It can be stated that malignancies are the second and third cause of mortality in developed and underdeveloped countries, respectively [2]. It is estimated that with uncontrollable growth of human exposure to environmental risk factors, we will observe the higher incidence of cancers in the following years, as a result, the chance for develop the cancer for each person would be 50% to 60% in

2050 [3]. Statistically, as most countries in the world, the rate of cancers in Iran is increasing. In some cases this prevalence is higher than the standard levels [4]. according to the Iran ministry of health report published by 2007 (based on the report of Pathology center, exclusively), cancers of skin, breast, stomach, colorectal, liver, hematopoietic system, esophagus, prostate, lung, brain, and the central nervous system (CNS) are the most prevalent malignancies in Iran [3]. among these, hematological malignancies with 5.7% incidence ranked sixth, showing 1.3 increase relative to 2005 report. Currently based on the standards of health organizations,